BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work: Construction of Concrete Road and Drains at Attur Colony.

MODIFIED ESTIMATE

Sl No.	Description of work	Unit	No	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
1	Earth work excavation by manual means for drains, canals, waste weir, draft, approach channels, key trenches, foundation of Buildings & bridges and such simillar works in all kinds of soils, as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. 1.4.1 In all kinds of soils Depth upto 1.5 m								
		Cum							
	For RCC Drain								
	1st Cross Road Venkataramanappa Layout from Attur Lake Road								
	LHS		1	121.00	1.40	1.20	203.28		
	Anganawadi School Road from 1st Cross Road to Aralikatte								
	LHS		1	6.00	1.40	1.20	10.08		
			1	73.00	1.10	1.10	88.33		
	2nd Main Road from Nursing Collage Hostel (At Samudhaya Bhavana)								
	LHS		1	49.00	0.95	0.90	41.90		
	RHS		1	12.40	0.95	0.90	10.60		
	Road from 2nd Main Road to Attur Main Road								
	LHS		1	85.40	0.95	0.90	73.02		
	RHS		1	95.60	0.95	0.90	81.74		
	Road from Anganawadi School Road to Sri Renuka Yallamma Nilaya No.08								
	RHS		1	33.00	1.40	1.20	55.44		
	From Sri Renuka Yallamma Nilaya No.08 to Nisarga No.03								
	RHS		1	30.50	1.40	1.20	51.24		
			1	166.00	1.10	0.90	164.34		
	For RCC Culvert								
	In Anganwadi School Road		1	6.40	1.50	1.20	11.52		
	At Vishwa House		1	6.00	1.20	1.20	8.64		
	At 2nd Main Road		1	7.40	1.20	1.20	10.66		
	At Ajji House		1	4.30	1.20	1.20	6.19		
	At Nisarga House No.03		1	5.80	1.20	1.20	8.35		
						Total Quantity	**825.32**		
						Total Schedule-B Quantity	**1165.25**		
						Quantity Upto 125%	**825.32**	**371.59**	**306681.40**
2	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates								
		Cum							
	For RCC Drain								
	1st Cross Road Venkataramanappa Layout from Attur Lake Road								
	LHS		1	121.00	1.40	0.15	25.41		
	Anganawadi School Road from 1st Cross Road to Aralikatte								
	LHS		1	6.00	1.40	0.15	1.26		
			1	73.00	1.10	0.15	12.05		
	2nd Main Road from Nursing Collage Hostel (At Samudhaya Bhavana)								
	LHS		1	49.00	0.95	0.15	6.98		
	RHS		1	12.40	0.95	0.15	1.77		

No.	Description of work	Unit	No	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	Road from 2nd Main Road to Attur Main Road								
			1	85.40	0.95	0.15	12.17		
			1	95.60	0.95	0.15	13.62		
	Road from Anganawadi School Road to Sri Renuka Yallamma Nilaya No.08								
			1	33.00	1.40	0.15	6.93		
	From Sri Renuka Yallamma Nilaya No.08 to Nisarga No.03								
			1	30.50	1.40	0.15	6.41		
			1	166.00	1.10	0.15	27.39		
	For RCC Culvert								
	In Anganwadi School Road		1	6.40	1.50	0.15	1.44		
	At Vishwa House		1	6.00	1.20	0.15	1.08		
	At 2nd Main Road		1	7.40	1.20	0.15	1.33		
	At Ajji House		1	4.30	1.20	0.15	0.77		
	At Nisarga House No.03		1	5.80	1.20	0.15	1.04		
						Total Quantity	**119.65**		
						Total Schedule-B Quantity	**144.41**		
						Quantity Upto 125%	**119.65**	**6784.88**	**811824.46**
3	Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification								
		Tonne							
	For RCC Drain 60Kg per Cum of Concrete			235.64		0.06	14.14		
	For RCC Culvert 90Kg per Cum of Concrete			14.62		0.09	1.32		
						Total Quantity	**15.45**		
						Total Schedule-B Quantity	**18.66**		
						Quantity Upto 125%	**15.45**	**89510.77**	**1383261.49**
4	Providing and laying in position Cement Concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates								
		Cum							
	For Raft								
	For RCC Drain								
	1st Cross Road Venkataramanappa Layout from Attur Lake Road								
	LHS		1	121.00	1.20	0.15	21.78		
	Anganawadi School Road from 1st Cross Road to Aralikatte								
	LHS		1	6.00	1.20	0.15	1.08		
			1	73.00	0.90	0.15	9.86		
	2nd Main Road from Nursing Collage Hostel (At Samudhaya Bhavana)								
	LHS		1	49.00	0.75	0.15	5.51		
	RHS		1	12.40	0.75	0.15	1.40		
	Road from 2nd Main Road to Attur Main Road								
			1	85.40	0.75	0.15	9.61		
			1	95.60	0.75	0.15	10.76		
	Road from Anganawadi School Road to Sri Renuka Yallamma Nilaya No.08								
			1	33.00	1.20	0.15	5.94		
	From Sri Renuka Yallamma Nilaya No.08 to Nisarga No.03								
			1	30.50	1.20	0.15	5.49		
			1	166.00	0.90	0.15	22.41		
	For RCC Culvert								
	In Anganwadi School Road		1	6.40	1.30	0.20	1.66		
	At Vishwa House		1	6.00	1.00	0.20	1.20		
	At 2nd Main Road		1	7.40	1.00	0.20	1.48		

No.	Description of work	Unit	No	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	At Ajji House		1	4.30	1.00	0.20	0.86		
	At Nisarga House No.03		1	5.80	1.00	0.20	1.16		
	For Wall								
	For RCC Drain								
	1st Cross Road Venkataramanappa Layout from Attur Lake Road								
	LHS		2	121.00	0.15	0.90	32.67		
	Anganawadi School Road from 1st Cross Road to Aralikatte								
	LHS		2	6.00	0.15	0.90	1.62		
			2	73.00	0.15	0.77	16.86		
	2nd Main Road from Nursing Collage Hostel (At Samudhaya Bhavana)								
	LHS		2	49.00	0.15	0.60	8.82		
	RHS		2	12.40	0.15	0.60	2.23		
	Road from 2nd Main Road to Attur Main Road								
			2	85.40	0.15	0.60	15.37		
			2	95.60	0.15	0.60	17.21		
	Road from Anganawadi School Road to Sri Renuka Yallamma Nilaya No.08								
			2	33.00	0.15	0.90	8.91		
	From Sri Renuka Yallamma Nilaya No.08 to Nisarga No.03								
			2	30.50	0.15	0.90	8.24		
			2	166.00	0.15	0.60	29.88		
	For RCC Culvert								
	In Anganwadi School Road		2	6.40	0.23	0.60	1.77		
	At Vishwa House		2	6.00	0.23	0.60	1.66		
	At 2nd Main Road		2	7.40	0.23	0.60	2.04		
	At Ajji House		2	4.30	0.23	0.60	1.19		
	At Nisarga House No.03		2	5.80	0.23	0.60	1.60		
						Total Quantity	**250.25**		
						Total Schedule-B Quantity	**301.76**		
						Quantity Upto 125%	**250.25**	**7521.42**	**1882245.88**
5	Providing & fixing precast reinforced cement concrete covering slabs of 10 cm thick made of M20 with OPC cement, with 20mm and down size graded granite metal coarse aggregate @0.70 cum and fine aggregate & 0.74 cum with superplasticizer machine, mixed, including providing and removing centering, shuttering, strutting, propping etc., for edges of slabs with TMT steel (Fe500) cost of all materils, labour, all lead and lift, HOM of machinery, curing, including cost of reinforecement etc., complete as directed by the engineer in charge of the work.								
		Sqm							
	For RCC Drain								
	1st Cross Road Venkataramanappa Layout from Attur Lake Road								
	LHS		1	121.00	1.20		145.20		
	Anganawadi School Road from 1st Cross Road to Aralikatte								
	LHS		1	6.00	1.20		7.20		
			1	73.00	0.90		65.70		
	2nd Main Road from Nursing Collage Hostel (At Samudhaya Bhavana)								
	LHS		1	49.00	0.75		36.75		
	RHS		1	12.40	0.75		9.30		
	Road from 2nd Main Road to Attur Main Road								
			1	85.40	0.75		64.05		
			1	95.60	0.75		71.70		
	Road from Anganawadi School Road to Sri Renuka Yallamma Nilaya No.08								
			1	33.00	1.20		39.60		
	From Sri Renuka Yallamma Nilaya No.08 to Nisarga No.03								
			1	30.50	1.20		36.60		
			1	166.00	0.90		149.40		
						Total Quantity	**625.50**		
						Total Schedule-B Quantity	**804.00**		
						Quantity Upto 125%	**625.50**	**2133.95**	**1334785.73**

No.	Description of work	Unit	No	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
6	Providing & fixing precast reinforced cement concrete covering slabs of 23 cm thick made of M25 with OPC cement @340Kgs/cum, with 20mm and down size graded granite metal coarse aggregate @0.70 cum and fine aggregate & 0.74 cum with superplasticizer machine, mixed, including providing and removing centering, shuttering, strutting, propping etc., for edges of slabs with TMT steel (Fe500) cost of all materils, labour, all lead and lift, HOM of machinery, curing, including cost of reinforecement etc., complete as directed by the engineer in charge of the work.								
		Sqm							
	For RCC Culvert								
	In Anganwadi School Road		1	6.40	1.50		9.60		
	At Vishwa House		1	6.00	1.20		7.20		
	At 2nd Main Road		1	7.40	1.20		8.88		
	At Ajji House		1	4.30	1.20		5.16		
	At Nisarga House No.03		1	5.80	1.20		6.96		
						Total Quantity	**37.80**		
						Total Schedule-B Quantity	**42.00**		
						Quantity Upto 125%	**37.80**	**5187.61**	**196091.66**
7	Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 m3 in volume and stock piling at designated locations and disposal of dismantled materials and stacking serviceable and unserviceable materials separatel complete as per thew direction of Engineer in charge.								
		Cum							
	For Damaged CC Road								
	2nd Main Road from Nursing Collage Hostel (At Samudhaya Bhavana)								
			1	53.50	5.50	0.15	44.14		
	Road from 2nd Main Road to Attur Main Road								
			1	95.50	3.45	0.15	49.42		
						Total Quantity	**93.56**		
						Total Schedule-B Quantity	**114.38**		
						Quantity Upto 125%	**93.56**	**637.82**	**59673.64**
8	Construction of dry lean cement concrete Sub- base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 14:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 140 kg/ m3 , optimum moisture content to be determined during trial length construction, concrete strength not to be less than 7 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 t vibratory roller, finishing and curing as per the direction of engineer in charge								
		Cum							
	For CC Road								
	2nd Main Road from Nursing Collage Hostel (At Samudhaya Bhavana)								
			1	53.50	5.50	0.15	44.14		
	Road from 2nd Main Road to Attur Main Road								
			1	95.50	3.45	0.15	49.42		
	Opp Samudhaya Bhavana								
			1	12.80	4.10	0.15	7.87		
	From Samudhaya Bhavana to Aralikatte								
			1	30.00	6.45	0.15	29.03		
	Anganawadi School Road from Aralikatte to 1st Cross								
			1	74.00	5.00	0.15	55.50		
	Temple Surrounding		1	10.80	2.00	0.15	3.24		
	Deductions		-1	1.10	1.15	0.15	-0.19		
						Total Quantity	**189.01**		
						Total Schedule-B Quantity	**91.50**		
						Quantity Upto 125%	**114.38**	**5573.82**	**637505.66**
						Quantity Above 125%	**74.63**	**5628.48**	**420059.09**

No.	Description of work	Unit	No	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
	Rate Analysis								
	Basic Rate	4920.00							
	Area Weightage @10%	492.00							
	Total Amount	**5412.00**							
	Add TP 4% Above	216.48							
	Total Amount	**5628.48**							
9	Providing and constructing un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 M30 (Grade), coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity and appropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including construction joints, , primer, sealant , curing of concrete slabs for 14- days, and water finishing to lines and grade as per drawing and technical specification clause 1501 with all lead, lifts, loading & unloading charges, cost and conveyance of all materials, labour, equipments etc., complete. as per the directions of the Engineer-in-charge of the work								
		Cum							
	For CC Road								
	2nd Main Road from Nursing Collage Hostel (At Samudhaya Bhavana)								
			1	53.50	5.50	0.15	44.14		
	Road from 2nd Main Road to Attur Main Road								
			1	95.50	3.45	0.15	49.42		
	Opp Samudhaya Bhavana								
			1	12.80	4.10	0.15	7.87		
	From Samudhaya Bhavana to Aralikatte								
			1	30.00	6.45	0.15	29.03		
	Anganawadi School Road from Aralikatte to 1st Cross								
			1	74.00	5.00	0.15	55.50		
	Temple Surrounding		1	10.80	2.00	0.15	3.24		
	Deductions		-1	1.10	1.15	0.15	-0.19		
						Total Quantity	**189.01**		
						Total Schedule-B Quantity	**91.50**		
						Quantity Upto 125%	**114.38**	**7651.54**	**875144.89**
						Quantity Above 125%	**74.63**	**7726.58**	**576642.09**
	Rate Analysis								
	Basic Rate	6754.00							
	Area Weightage @10%	675.40							
	Total Amount	**7429.40**							
	Add TP 4% Above	297.18							
	Total Amount	**7726.58**							
10	Cost of Haulage Excluding Loading and Unloading Taking output 10 t load and lead 10 km = 100 t.km								
		T.km							
	Vide Qty from Item No.01			825.32		1.28	1056.41		
	Vide Qty from Item No.07			93.56		2.10	196.47		
						Total Quantity	**1252.89**		
						Total Schedule-B Quantity	**1731.71**		
						Quantity Upto 125%	**1252.89**	**90.63**	**113549.02**
	EIRL-Items								

No.	Description of work	Unit	No	Dimenstions in m			Quantity	Rate in Rs.	Amount in Rs.
				L in m	B in m	D in m			
E-1	Providing and fixing pre cast solid cement concrete kerb stones made out of M20 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work,curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete. as directed by the Engineer in Charge of the work. Approved Rate								
		Nos							
	Anganawadi School Road from 1st Cross Road to Aralikatte								
	LHS		1	72.10		"/0.45	160.00		
	From Sri Renuka Yallamma Nilaya No.08 to Nisarga No.03								
			1	30.50		"/0.45	68.00		
						Total Quantity	228.00	527.28	120219.84
	Rate Analysis								
	Basic Rate	507.00							
	Total Amount	**507.00**							
	Add TP 4% above	20.28							
	Total Amount	**527.28**							
E-2	Painting two coats after filling the surface with synthetic enamel paint in all shades on new plastered concrete surfaces (KPWD SR 2023-24, V-III, Page No.66, Item No.8.10)								
		Sqm							
	Anganawadi School Road from 1st Cross Road to Aralikatte								
	LHS		1	72.10		0.35	25.24		
	From Sri Renuka Yallamma Nilaya No.08 to Nisarga No.03								
			1	30.50		0.35	10.68		
						Total Quantity	35.91	124.70	4477.83
	Rate Analysis								
	Basic Rate	109.00							
	Area Weightage @10%	10.90							
	Total Amount	**119.90**							
	Add TP 4% above	4.80							
	Total Amount	**124.70**							
								Total Construction Cost	₹ 87,22,163.00
								Add GST Charges 18%	₹ 15,69,989.00
								Grand Total	₹ 1,02,92,152.00

CERTIFICATE:

1. The work spot has been inspected by me and the work is found to be necessary.
2. The estimate is prepared as per PW, P&IWTD S.R Bangalore circle for the year 2022-23
3. The Provisions made in the estimate are quite necessary and adequate.
4. The area comes with in the BBMP limits.

Asst. Engineer Ward No.01 BBMP, Bnagalore	Asst. Executive Engineer Yelahanka Sub Division BBMP, Bnagalore	Executive Engineer Yelahanka Division BBMP, Bnagalore

Executive Engineer,
Yelahanka Division,
B.B.M.P, Bangalore - 64

Technical Sanction
Accorded For Rs 1,02,92,152.00 (including GST)
Head of A/C P.1828
CER NO : 25 Dt: 15/06/24